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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

NELSON, AMY J

ART UNIT

PAPER NUMBER

1638

35

DATE MAILED: 07/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES DEPARTMENT OF COMMERCE
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SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.

EXAMINER	
ART UNIT	PAPER NUMBER
	35

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Below is a communication from the EXAMINER in charge of this application
COMMISSIONER OF PATENTS AND TRADEMARKS

ADVISORY ACTION

☐ THE PERIOD FOR RESPONSE:

- a) ☐ is extended to run _____ or continues to run _____ from the date of the final rejection
- b) ☐ expires three months from the date of the final rejection or as of the mailing date of this Advisory Action, whichever is later. In no event however, will the statutory period for the response expire later than six months from the date of the final rejection.

Any extension of time must be obtained by filing a petition under 37 CFR 1.136(a), the proposed response and the appropriate fee. The date on which the response, the petition, and the fee have been filed is the date of the response and also the date for the purposes of determining the period of extension and the corresponding amount of the fee. Any extension fee pursuant to 37 CFR 1.17 will be calculated from the date of the originally set shortened statutory period for response or as set forth in b) above.

- ☒ Appellant's Brief is due in accordance with 37 CFR 1.192(a).
- ☒ Applicant's response to the final rejection, filed 6/16/03 has been considered with the following effect, but it is not deemed to place the application in condition for allowance:

1. ☐ The proposed amendments to the claim and/or specification will not be entered and the final rejection stands because:
- a. ☐ There is no convincing showing under 37 CFR 1.116(b) why the proposed amendment is necessary and was not earlier presented.
- b. ☐ They raise new issues that would require further consideration and/or search. (See Note).
- c. ☐ They raise the issue of new matter. (See Note).
- d. ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal.
- e. ☐ They present additional claims without cancelling a corresponding number of finally rejected claims.

NOTE: Additional 112, second issues are raised in claims 14-24 by the new claim language "comprising 2 sequences of nucleotides encoding or complementary to a sequence encoding".
See attached proposed EXAMINER'S AMENDMENT ***

2. ☐ Newly proposed or amended claims _____ would be allowed if submitted in a separately filed amendment cancelling the non-allowable claims.
3. ☒ Upon the filing an appeal, the proposed amendment ☒ will be entered ☐ will not be entered and the status of the claims will be as follows:
- Claims allowed: 3-5 7-10
- Claims objected to: _____
- Claims rejected: 6 11-24 26 27 30 33-37

However:

- ☒ Applicant's response has overcome the following rejection(s): objection to specification, 112, second rejection, 102 rejection

4. ☒ The affidavit, exhibit or request for reconsideration has been considered but does not overcome the rejection because claim objections in 112, first rejection maintained for the partial sequences (CDS SEQ ID NO. 7, 8, 10-13, 20-25) finally, applicant is not entitled to

5. ☐ The affidavit or exhibit will not be considered because applicant has not shown good and sufficient reasons why it was not earlier presented.

☐ The proposed drawing correction ☐ has ☐ has not been approved by the examiner.

☐ Other: comprising language for said claims. Also, applicant is not enabled for vectors, plasmids, and methods of reducing expression of (1-uronid 3-hydroxylase or adding color in plants with said partial sequences.

AMY J. NELSON, PH.D.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600

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PROPOSED EXAMINER'S AMENDMENT

1. An extension of time under 37 CFR 1.136(a) is required in order to make an examiner's amendment which places this application in condition for allowance. During a telephone conversation conducted on 7/1/03, Frank DiGiglio requested an extension of time for 1 MONTH(S) and authorized the Commissioner to charge Deposit Account No. 19-1033 the required fee of \$520 for this extension and authorized the following examiner's amendment. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. The application has been amended as follows:

In the Claims:

At Claims 6, and 11-13, line 2, "comprising" has been changed to --consisting of--.

Claim 14 (twice amended). An isolated nucleic acid molecule [comprising a sequence of nucleotides encoding or complementary to a sequence] encoding the amino acid sequence as set forth in SEQ ID NO:2, or the complement of said nucleic acid molecule.

Claim 15 (twice amended). An isolated nucleic acid molecule [comprising a sequence of nucleotides encoding or complementary to a sequence] encoding the amino acid sequence as set forth in SEQ ID NO:4, or the complement of said nucleic acid molecule.

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Claim 16 (twice amended). An isolated nucleic acid molecule [comprising a sequence of nucleotides encoding or complementary to a sequence] encoding the amino acid sequence as set forth in SEQ ID NO:6, or the complement of said nucleic acid molecule.

Claim 17 (twice amended). An isolated nucleic acid molecule [comprising a sequence of nucleotides encoding or complementary to a sequence] encoding the amino acid sequence as set forth in SEQ ID NO:8, or the complement of said nucleic acid molecule.

Claim 18 (twice amended). An isolated nucleic acid molecule [comprising a sequence of nucleotides encoding or complementary to a sequence] encoding the amino acid sequence as set forth in SEQ ID NO:10 or SEQ ID NO:11 or SEQ ID NO:12 or SEQ ID NO:13, or the complement of said nucleic acid molecule.

Claim 19 (twice amended). An isolated nucleic acid molecule [comprising a sequence of nucleotides encoding or complementary to a sequence] encoding the amino acid sequence as set forth in SEQ ID NO:15, or the complement of said nucleic acid molecule.

Claim 20 (twice amended). An isolated nucleic acid molecule [comprising a sequence of nucleotides encoding or complementary to a sequence] encoding the amino acid sequence as set forth in SEQ ID NO:17, or the complement of said nucleic acid molecule.

Claim 21 (twice amended). An isolated nucleic acid molecule [comprising a sequence of nucleotides encoding or complementary to a sequence] encoding the amino acid sequence as set forth in SEQ ID NO:19, or the complement of said nucleic acid molecule.

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Claim 22 (twice amended). An isolated nucleic acid molecule [comprising a sequence of nucleotides encoding or complementary to a sequence] encoding the amino acid sequence as set forth in SEQ ID NO:21, or the complement of said nucleic acid molecule.

Claim 23 (twice amended). An isolated nucleic acid molecule [comprising a sequence of nucleotides encoding or complementary to a sequence] encoding the amino acid sequence as set forth in SEQ ID NO:23, or the complement of said nucleic acid molecule.

Claim 24 (twice amended). An isolated nucleic acid molecule [comprising a sequence of nucleotides encoding or complementary to a sequence] encoding the amino acid sequence as set forth in SEQ ID NO:25, or the complement of said nucleic acid molecule.

Claim 26 (twice amended). A [genetic] DNA construct capable of reducing expression of an endogenous gene encoding a flavonoid 3'-hydroxylase in a plant, said [genetic] DNA construct comprising a nucleotide sequence selected from the group consisting of:

(i) a nucleotide sequence encoding an amino acid sequence selected from the group consisting of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, [SEQ ID NO:8, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13,] SEQ ID NO:15, SEQ ID NO:17, and SEQ ID NO:19, [SEQ ID NO:21, SEQ ID NO:23, and SEQ ID NO:25]; and

(ii) a nucleotide sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, [SEQ ID NO:7,] SEQ ID NO:14, SEQ ID NO:16, SEQ ID NO:18, [SEQ ID NO:20, SEQ ID NO:22 or SEQ ID NO:24,] and [the coding region in] nucleotides 1478 to 3897 of SEQ ID NO:9.

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Claim 27 (twice amended). A method for producing a transgenic plant which synthesizes a flavonoid 3'-hydroxylase, said method comprising:

stably transforming a cell of a plant with the nucleic acid molecule according to any one of claims [3-24 under conditions wherein said nucleic acid molecule is expressed] 3-5, 7-10, and 15-21 to produce a transformed cell;

regenerating a transgenic plant from the transformed cell; and

growing said transgenic plant [for a time and under conditions] wherein the nucleic acid molecule is expressed.

Claim 33 (twice amended). A transgenic plant having flower tissue exhibiting altered colour, said transgenic plant comprising a nucleic acid molecule [which comprises a sequence of nucleotides] selected from the group consisting of:

(i) a nucleotide sequence encoding an amino acid sequence selected from the group consisting of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, [SEQ ID NO:8, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13,] SEQ ID NO:15, SEQ ID NO:17, and SEQ ID NO:19, [SEQ ID NO:21, SEQ ID NO:23, and SEQ ID NO:25]; and

(ii) a nucleotide sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, [SEQ ID NO:7,] SEQ ID NO:14, SEQ ID NO:16, SEQ ID NO:18, [SEQ ID NO:20, SEQ ID NO:22 or SEQ ID NO:24,] and [the coding region in] nucleotides 1478 to 3897 of SEQ ID NO:9.

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Claim 34 (twice amended). [The] A cut flower from the transgenic plant according to claim 33.

Claim 35 (twice amended). [The] A seed from the transgenic plant according to claim 33.

Claim 36 (twice amended). [The] A fruit from the transgenic plant according to claim 33.

Claim 37 (twice amended). [The] A leaf from the transgenic plant according to claim 33.

In the Specification:

The Title of the Invention has been changed to:

--NUCLEIC ACID SEQUENCES ENCODING FLAVONOID 3'-HYDROXYLASE
AND METHODS OF ALTERING FLOWER COLOR THEREWITH--

The Abstract of the Invention has been amended as follows:

At line 1, "genetic" has been changed to --nucleic acid--.

At lines 1-2, "flavonoid pathway metabolising enzyme and more particularly to" has been deleted.

At line 3, "or derivatives thereof" has been deleted.

At line 4, before "plants" --flowers of-- has been inserted.

At line 4, "and other organisms" has been deleted.

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3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy J. Nelson whose telephone number is (703) 306-3218. The examiner can normally be reached on Monday-Friday from 8:30 AM - 5:00 PM.

The fax phone number for this Group is (703) 308-4242 or (703) 305-3014.

Any inquiry of a general nature or relating to the status of this application, or if the examiner cannot be reached as indicated above, should be directed to Customer Service 1600, whose telephone number is (703) 305-0198.

Amy J. Nelson, Ph.D.

July 7, 2003